

We Claim:

1. A light source comprising:

- a. a light emitting component comprised of a semiconductor material,
- 5 b. at least one phosphor material, and
- c. at least one UV reflecting material.

10 *Sub C1 comp.*

2. The light source of claim 1 wherein the light emitting component comprises a light emitting diode or a laser diode.
- 15 3. The light source of claim 2 wherein the light emitting component emits light in at least one of the blue region and the UV region of the electromagnetic spectrum.
4. The light source of claim 1, wherein said phosphor is excited by light emitted from the said light emitting component.
- 15 5. The light source of claim 1 wherein said phosphor converts UV light to visible.
- 20 6. The light source of claim 1 wherein said UV reflecting material reflects UV light into the phosphor layer.
7. The light source of claim 1 wherein said UV reflecting material reflects at least a substantial portion of UV light emitted by said light emitting component.

8. The light source of claim 1 wherein said UV reflecting material reflects at least 90% of any UV light not converted to visible light by said phosphor.

5 9. The light source of claim 1 wherein said UV reflecting material comprises alumina.

10. The light source of claim 1 wherein said UV reflecting material comprises alpha alumina, gamma aluminum, and mixtures thereof.

10 11. The light source of claim 10 wherein said UV reflecting material contains about 5-80 wt% gamma alumina and about 20-95 wt% alpha alumina.

12. The light source of claim 1 wherein said UV reflecting material is disposed as a layer adjacent to the phosphor.

15 13. The light source of claim 1 wherein said UV reflecting material is disposed as a layer adjacent a layer of a transparent material.

14. The light source of claim 1 wherein said UV reflecting material is dispersed in a phosphor containing layer.

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15. The light source of claim 14 wherein the concentration of UV reflecting material dispersed throughout the phosphor is not greater than about 25% by volume of said phosphor.

5 16. The light source of claim 1 wherein said UV reflecting layer reflects light in the range of about 350-400 nm.

17. The light source of claim 1 wherein said phosphor layer converts light reflected by the UV reflecting layer to visible light.

18. A white light emitting device comprising:

- a. a light emitting diode,
- b. at least one phosphor containing layer,
- c. at least one UV reflecting material containing layer, and
- 15 d. at least one encapsulant layer, said UV reflecting material containing layer disposed outwardly from said phosphor containing layer.

19. A light emitting device comprising:

- a. an LED of the formula $In_xGa_yAl_zN$, wherein I, J, and K are each greater than or 20 equal to zero, and $I+J+K=1$,
- b. a phosphor layer, and
- c. an encapsulant layer including a UV reflecting material and/or a UV reflecting layer.